

REMARKS

Please note that the Attorney Docket No. and correspondence address for this application have changed.

Upon entry of this amendment, claims 16-42, 44-47, 50, 51, 53, and 57-77 will be pending in the application. Claims 16-42, 46, 47, 50, 51, and 53 are allowed.

Claims 44, 45, 57, 71, 72, 76, and 77 have been amended per the Examiner's recommendations in the Final Office Action, Paper No. 30. The amendments are supported throughout the specification and drawings, and no new matter has been introduced. Support for the overexpression of polynucleotides of the invention in breast cancer, which is recited in amended claims 71, 72, 76, and 77, includes page 25, line 27 through page 26, line 19, Examples 5, 6, and 7, and Table 1.

Claim Rejections under 35 U.S.C. § 112, First Paragraph, Written Description

Claims 44, 45, and 57-77 stand rejected for alleged lack of written description based on reasons expressed in the previous Office Action, Paper No. 26. This rejection is respectfully traversed.

Claims 44-47, and 57-70 recite polynucleotides consisting of at least specified polynucleotide fragments of SEQ ID NO:1 or polynucleotide fragments encoding specified amino acid residues of SEQ ID NO:2. The Examiner has indicated that these claims would be allowable if amended to specify that the polynucleotide fragment is a fragment of SEQ NO:1 (claims 44, 45) or that the polynucleotide encodes a fragment of SEQ ID NO:2 (claims 57-70). Claims 44, 45, and 57 have been amended in accordance with the Examiner's suggestions solely to facilitate prosecution and not in acquiescence with the Examiner's assertions regarding written description. Applicants reserve the right to pursue additional claim scope in a continuing application.

Claims 71-77 recite polynucleotide variants of specified portions of SEQ ID NO:1 and polynucleotides encoding variants of specified portions of the amino acid sequence of SEQ ID NO:2 or the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 97856. Applicants' previous amendments specified that the encoded polypeptide binds an antibody with specificity for the polypeptide consisting of amino acids 1 to 127 of SEQ ID NO:2. The Examiner has stated that these claims lack written description because "[b]inding to an antibody with specificity for any epitope of SEQ ID NO:2 is not an essential feature of the claimed variant polynucleotides" Paper No. 30

at page 4, lines 3-4. The Examiner has also indicated that these claims would be allowable if instead of antibody binding they recited a requirement that the claimed polynucleotide is "overexpressed in breast cancer." Claims 71, 72, 76, and 77 have been amended in accordance with the Examiner's suggestions solely to facilitate prosecution and not in acquiescence with the Examiner's assertion that claims which specify antibody binding lack written description. Applicants reserve the right to pursue claims to variants which bind an antibody with specificity for SEQ ID NO:2 in a continuing application.

Applicants believe that the claims are now in condition for allowance. Withdrawal of the rejection is respectfully requested.

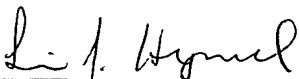
CONCLUSION

Applicants respectfully request that the above-made remarks be entered and made of record in the file history of the instant application. Applicants believe that this application is now in condition for allowance.

If there are any fees due in connection with the filing of this paper, please charge the fees to Deposit Account No. 08-3425. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to Deposit Account No. 08-3425.

Respectfully submitted,

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Docket No.: PF342

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Ji et al.

Application No.: 09/017,715

Group Art Unit: 1642

Filed: February 3, 1998

Examiner: Canella, K.

For: Breast Cancer Specific Gene 1

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims

Please amend the claims as indicated below.

44. An isolated polynucleotide fragment of SEQ ID NO:1 consisting of at least 100 contiguous nucleotides of the coding region of SEQ ID NO:1 or the complement thereof.

45. The isolated polynucleotide fragment of claim 44, consisting of at least 250 contiguous nucleotides of the coding region of SEQ ID NO:1 or the complement thereof.

57. An isolated polynucleotide, encoding a ~~polypeptide~~ fragment of SEQ ID NO:2 selected from the group consisting of:

(a) a ~~polypeptide~~ fragment of SEQ ID NO:2 consisting of at least amino acids 94 to 107 of SEQ ID NO:2; and

(b) a ~~polypeptide~~ fragment of SEQ ID NO:2 consisting of at least amino acids 120 to 127 of SEQ ID NO:2.

71. An isolated polynucleotide molecule comprising a nucleic acid 95% or more identical to a reference nucleic acid encoding an amino acid sequence selected from the group consisting of:

(a) amino acids 1 to 127 of SEQ ID NO:2;

(b) amino acids 2 to 127 of SEQ ID NO:2; and

(c) the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 97856;
~~wherein said polynucleotide encodes a polypeptide which binds an antibody with specificity for the polypeptide consisting of amino acids 1 to 127 of SEQ ID NO:2 wherein said~~
polynucleotide is overexpressed in breast cancer.

72. An isolated polynucleotide comprising a nucleic acid encoding an amino acid sequence, wherein, except for one to thirty conservative amino acid substitutions, said amino acid sequence is selected from the group consisting of:

- (a) amino acids 1 to 127 of SEQ ID NO:2;
- (b) amino acids 2 to 127 of SEQ ID NO:2; and
- (c) the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 97856;
~~wherein said polynucleotide encodes a polypeptide which binds an antibody with specificity for the polypeptide consisting of amino acids 1 to 127 of SEQ ID NO:2 wherein said~~
polynucleotide is overexpressed in breast cancer.

76. An isolated polynucleotide comprising a nucleic acid encoding an amino acid sequence 95% or more identical to a reference amino acid sequence from the group consisting of:

- (a) amino acids 1 to 127 of SEQ ID NO:2;
- (b) amino acids 2 to 127 of SEQ ID NO:2; and
- (c) the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 97856;
~~wherein said polynucleotide encodes a polypeptide which binds an antibody with specificity for the polypeptide consisting of amino acids 1 to 127 of SEQ ID NO:2 wherein said~~
polynucleotide is overexpressed in breast cancer.

77. An isolated polynucleotide comprising a nucleic acid which is 95% or more identical to a reference nucleic acid, wherein said reference nucleic acid is selected from the group consisting of:

- (a) nucleotides 15 to 392 of SEQ ID NO:1; and
- (b) nucleotides 12 to 392 of SEQ ID NO:1;

~~wherein said polynucleotide encodes a polypeptide which binds an antibody with specificity for the polypeptide consisting of amino acids 1 to 127 of SEQ ID NO:2 wherein said polynucleotide is overexpressed in breast cancer.~~
